AMENDMENTS TO THE CLAIMS

1. (Canceled)

2. (Currently Amended) A method for the treatment of thrombocythemia in a patient with thrombocythemia comprising transdermally administering to said patient an effective amount of a skin permeable form of anagrelide or a pharmaceutically acceptable salt of anagrelide to minimize first pass liver metabolism thereby reducing the plasma concentration of 3-hydroxy anagrelide compared to a patient orally administered the equivalent amount of anagrelide.

3. (Previously Presented) The method according to claim 2, wherein the anagrelide or anagrelide salt is administered with a skin permeation enhancer.

4. (Canceled)

5. (Canceled)

6. (Previously Presented) The method according to claim 2, wherein the anagrelide or anagrelide salt is in the form of a reservoir formulation.

7. (Previously Presented) The method according to claim 2, wherein the anagrelide or anagrelide salt is in the form of a single layer formulation comprising the anagrelide or anagrelide salt and at least one adhesive.

8. (Previously Presented) The method according to claim 2, wherein the anagrelide or anagrelide salt is in the form of a multiple layer formulation wherein at least one layer of said multiple layer formulation comprises the anagrelide or anagrelide salt and at least one adhesive.

9. (Previously Presented) The method according to claim 2, wherein the anagrelide or anagrelide salt is in the form of a matrix formulation.

10. (Canceled)

11. (Canceled)

12. (Previously Presented) The method according to claim 2, wherein said thrombocythemia is associated with essential thrombocythemia (ET), chronic myologenous leukemia (CML), polycythemia vera (PV), agnogenic myeloid metaplasia (AMM) or sickle cell anemia (SCA).

13. (Previously Presented) The method according to claim 2, wherein the anagrelide or anagrelide salt is administered in an amount of 0.1 to 20 mg/kg/day.

14. (Previously Presented) The method according to claim 2, wherein the anagrelide or anagrelide salt is administered in a daily dose of 0.5 to 3 mg.

15. (Previously Presented) The method according to claim 2, wherein the anagrelide or anagrelide salt is administered in a daily dose of 1 to 2 mg.

16. (Canceled)

17. (Previously Presented) The method according to claim 2, wherein the anagrelide or anagrelide salt is in the form of a composition which further comprises at least one skin permeation enhancer.

18. (Previously Presented) The method according to claim 17, wherein said at least one skin permeation enhancer is linalool, carvacrol, thymol, citral, menthol, oleic acid, or t-anethole.

19. (Previously Presented) The method according to claim 2, wherein administration is via a transdermal patch having a single-layer drug-in-adhesive system comprising a composition containing the anagrelide or anagrelide salt, one or more excipients, and at least one skin-contacting adhesive, which is combined with a single backing film.

20. (Previously Presented) The method according to claim 2, wherein administration is via a transdermal patch having a multi-layer drug-in-adhesive system wherein: (a) said system comprises at least two distinct layers comprising the anagrelide or anagrelide salt and at least one adhesive, and a membrane between said at least two layers or (b) said system comprises at least two distinct layers comprising the anagrelide or anagrelide salt and at least one adhesive, and a single backing film.

21. (Previously Presented) The method according to claim 2, wherein administration is via a transdermal patch having a reservoir transdermal system comprising a liquid compartment containing a solution or suspension of the anagrelide or anagrelide salt, a release liner, and between said release liner and said liquid compartment, a semi-permeable membrane and at least one adhesive.

22. (Previously Presented) The method according to claim 2, wherein administration is via a transdermal patch having a matrix system comprising a semisolid matrix containing a solution or suspension of the anagrelide or anagrelide salt which is in direct contact with a release liner, and a skin adhesion component incorporated in an overlay which forms a concentric configuration around said semisolid matrix.

23. (Previously Presented) The method according to claim 2, wherein administration is via a transdermal patch containing the anagrelide or anagrelide salt intimately distributed in a matrix.

24. (Previously Presented) The method according to claim 2, wherein administration is via a transdermal patch containing 1 mg to 100 mg of the anagrelide or anagrelide salt per patch.

25. (Previously Presented) The method according to claim 2, wherein administration is via a transdermal patch containing an amount of the anagrelide or anagrelide salt to provide a daily dose of 0.5 to 3 mg.

26. (Previously Presented) The method according to claim 2, wherein administration is via a transdermal patch containing a composition comprising the anagrelide or anagrelide salt and an acrylic adhesive.

27. (Previously Presented) The method according to claim 26, wherein said composition contains 66 to 99.8% by weight acrylate adhesive.

28. (Previously Presented) The method according to claim 2, wherein administration is via a transdermal patch containing an amount of the anagrelide or anagrelide salt, azone, ethanol, water, propylene glycol and Klucel HF.

29. (Previously Presented) The method according to claim 28, wherein administration is via a transdermal patch containing the anagrelide or anagrelide salt, 0.1 to 10 parts by weight azone, from 30 to 69.8 parts ethanol, 29 to 50 parts by weight water, from 0 to 30 parts by weight propylene glycol, and 1 to 5 parts by weight Klucel HF.

30. (Previously Presented) The method according to claim 2, wherein administration is via a transdermal patch containing the anagrelide or anagrelide salt, ethanol, and Klucel HF.

31. (Previously Presented) The method according to claim 30, wherein administration is via a transdermal patch containing the anagrelide or anagrelide salt, 85 to 97 parts by weight ethanol and 2 to 14.9 parts Klucel HF.

32. (Previously Presented) The method according to claim 2, wherein administration is via a transdermal patch having an area of 5 cm^2 to 100 cm^2.

33. (Previously Presented) The method according to claim 2, wherein the anagrelide or anagrelide salt is administered over a period of time of 1 to 7 days.

34. (Previously Presented) The method according to claim 2, wherein the anagrelide or anagrelide salt is administered over a period of time of 3 to 4 days.

35. (Canceled)

36. (Previously Presented) The method according to claim 3, wherein said method comprises: (a) contacting said area of skin with the anagrelide or anagrelide salt and the skin permeation enhancer; and (b) maintaining said source in material transmitting relationship to said area of skin for a period of at least 12 hours.

37.-49. (Canceled)

50. (New) The method of claim 2, wherein the reduction in the plasma concentration of the 3-hydroxy anagrelide results in a reduction of the cardiovascular side effects in the patient compared to the cardiovascular side effects of the patient orally administered the equivalent amount of anagrelide.